

*Plant Variation and Evolution*. By D. BRIGGS and S. M. WALTERS. 256 pp., illustrated. McGraw-Hill Book Company, New York, 1969. \$2.45

This book is an introduction to plant biosystematics. The initial chapters sketch briefly the historical context in which modern plant systematics developed. The remainder and major portion of the book is written essentially as a discussion of speciation and includes the following topics: changes in population, breeding systems, hybridization, polyploidy, and patterns of evolution. The many well illustrated examples which accompany the text are drawn primarily from studies of the European Flora.

Many sections within the various chapters are exceptionally well written. Of particular note is the treatment of apomixis and hybridization. Although considerable space is devoted to the factors involved in species formation, the discussion of the "species problem" is most unsatisfactory. Rather than questioning if a single species definition is possible or desirable the authors state that "the 'ideal' 'biological', or 'evolutionary species' of the experamentalist is the *hologamodeme*, defined as composed of individuals which 'are believed to interbreed with a high level of freedom under a specified set of conditions, and separated from other hologamodemes by at least partial sterility'". Such a definition is clearly non-operational for most plant groups and therefore cannot be used as an absolute guideline by plant systematists.

The recently published *Plant Biosystematics* by Otto T. Solbrig is the only book comparable in its scope to *Plant Variation and Evolution*. However, in contrast, the Solbrig book appears to offer a more complete and accurate treatment of many topics.

*Plant Variation and Evolution* should best be regarded as a reference work for students.—DENNIS R. PARNELL, Department of Biological Science, California State College, Hayward, California.

## NOTES AND NEWS

RIBES MALVACEUM IN THE FOOTHILLS OF CALAVERAS COUNTY, CALIFORNIA.—In March, 1967, I observed a small population of *Ribes malvaceum* Sm. in the foothills of the Sierra Nevada near Valley Springs along the access road to the south arm of New Hogan Reservoir. Subsequent search revealed a considerable number of stations scattered a few miles apart in the chaparral at elevations ranging from 450 to 1000 feet. One large group of about 200 shrubs is located at the junction of the Southern Pacific Railroad with State Highway 12, 2 miles west of Valley Springs (*Taylor 11*, CAS, Fresno State College Herbarium, GH, MO). The plants at this locality are well spaced on a northwest exposure in association with a number of chaparral species including *Quercus wislizenii*, *Arctostaphylos mariposa*, *Baccharis pilularis* var. *consanguinea*, *Adenostoma fasciculatum*, and *Fremontodendron californicum*. Other localities in the area include the spillway at New Hogan Reservoir and along the south arm of the Reservoir (*Taylor 12*, Fresno State College Herbarium). All localities show uniformity as to slope, soil, and composition of the vegetation. This population extends the range southward in the Sierra Nevada from El Dorado Co.—DEAN WILLIAM TAYLOR, Biology Department, Fresno State College, Fresno, California.